

I claim:

1. A method of manufacture of an article of jewelry comprising:
providing a wire composed of between approximately 50 to 60 wt percent Ni and between approximately 40 to 50 wt percent Ti;
forming said wire into a desired shape;
elevating the temperature of said wire above the austenite phase finish temperature to impart a memory shape to said wire;
cooling said wire to below the martensite phase finish temperature; and
assembling said wire with other components to form said article of jewelry.
2. The method of claim 1, wherein said forming step is performed on a mandrel.
3. The method of claim 1, wherein said assembling step includes the steps of:
plastically deforming said wire to create plastic deformations in said wire; and
reheating said wire after said assembling step to above the austenite phase finish temperature in order to remove said plastic deformations.
4. The method of claim 1, further comprising the step of heat treating said wire to impart superelastic characteristics to said wire.

5. The method of claim 1, further comprising the step of forming multiple said wires and intertwining said wires to form a braid.

6. The method of claim 1, further comprising the step of forming multiple said wires and intertwining said wires to form a cable.

7. The method of claim 1, further comprising the step of laser welding said wire.

8. A method of manufacture of an article of jewelry comprising:

providing a cast component composed of between approximately 50 to 60 wt percent Ni and between approximately 40 to 50 wt percent Ti;

elevating the temperature of said cast component above the austenite phase finish temperature to impart a memory shape to said cast component;

cooling said cast component to below the martensite phase finish temperature; and

assembling said cast component with other components to form said article of jewelry.

9. The method of claim 8, further comprising the steps of:

plastically deforming said cast component during said assembling step to create plastic deformations in said cast component; and

reheating said cast component after said assembling step to above the austenite phase finish temperature in order to remove said plastic deformations.

10. The method of claim 8, further comprising the step of heat treating said cast component to impart superelastic characteristics to said cast component.
11. The method of claim 8, further comprising the step of laser welding said cast component.
12. The method of claim 8, wherein said step of providing a cast component comprises providing such cast component with a gap to receive a gem stone; and
further comprising the step of providing a gem stone larger than said gap; and
wherein said assembling step comprises widening said gap of said cast component and inserting said gem stone into said gap of said cast component; and
reheating said cast component after said inserting step to above the austenite phase finish temperature in order to secure said gem stone within said cast component.
13. The method of claim 12, wherein said cast component is provided in the shape of a gem stone mount.
14. The method of claim 12, wherein said cast component is provided in the shape of a ring.